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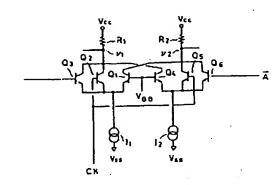
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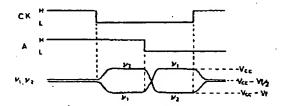
H03K 3/286 H01L 27/082

TITLE

SEMICONDUCTOR INTEGRATED

CIRCUIT





ABSTRACT :

PURPOSE: To make the lower limit of a power voltage sufficiently small by inputting complementary input signals to the bases of 3rd and 6th bipolar transistors(TRs), applying a clock signal to the bases of 2nd and 5th bipolar TRs, and feeding a reference signal to the bases of 1st and 4th TRs.

CONSTITUTION: The bases of TRs Q1, Q4 are connected in common, a reference voltage VBB is applied to the connecting point and a clock CK is inputted to the bases of the TRs Q2, Q5. Moreover, complementary input signals A, A' are inputted to the bases of TRs Q3, Q6. When the clock CK is at a high level, a same potential V_{cc} - $V_1/2$ appears at the nodes $\nu_1,\,\nu_2$ and when the clock CK is at a low level, an ECL logic signal appears at the nodes v₁, v₂ depending on the inputs A, A'. Thus, the transfer of data by the clock without series gating. As a result, a high voltage source V_{cc} is made close to a low voltage source V_{ss} and the lower limit of the power voltage is sufficiently made small.

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